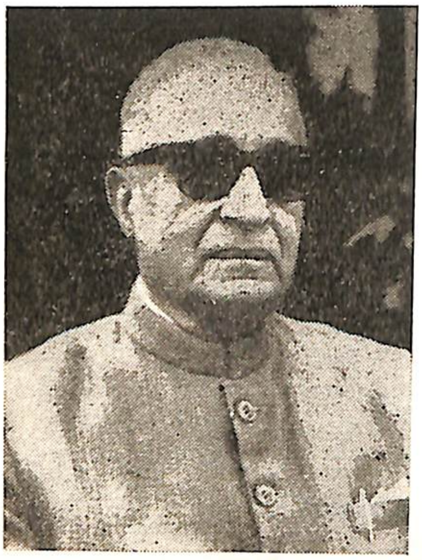
May - 1980

ORISSA REVIEW

Shri C. M. Poonacha, Governor-designate of Orissa being received by Shri K. S. Raghupathi, Advisor to the Governor at the Bhubaneswar Airport on his arrival from Bhopal on April 30, 1980.

Shri C. M. Poonacha being sworn-in as the Governor of Orissa at Soochana Bhavan, Bhubaneswar, on April 30, 1980.



Our Governor
Shri C. M. Poonacha

POONACHA, CHEPPUDIRA MUTHANA:—Assumed Office of Governor of Orissa on the 30th April 1980. B. 1910, Athur Village, South Coorg; Educ: Mercara and Virajpet in Coorg and St. Aloysius Coll., Mangalore. Left studies to join Satyagrah Movement, 1930; Imprisoned several times during Independence Movement; Member, Executive Committee, Karnataka Provincial Congress Committee, 1938, A. I. C. C., 1938; Coorg District Board, 1938, and its President, 1941; Coorg Legislative Council, and Leader of the Congress Legislative Party in the Council, 1945-46; Constituent Assembly, and Provisional Parliament, 1947—51; Chief Minister of Coorg, 1952-56. Minister for Industries and Commerce, 1957 and later for Home and Industries, Mysore, Chairman, State Trading Corporation, 1959—63; Leader, Government Trade Delegation to East European countries, 1963, and S. T. C. Delegation to Japan, 1961 and East Europe, 1963; Member of Parliament, Rajya Sabha, April 1964; Minister of Revenue and Expenditure, Union Finance Ministry, January 2—24, 1966; Minister in the Ministry of Transport, Aviation, Shipping and Tourism, Government of India, January 1966—March 1967, Minister for Railways, Government of India, March 1967—1969. A keen agriculturist.

ORISSA REVIEW

MAY 1980
Jaistha
Vol. XXXVI, No. 10

Editor-in-Chief
D. N. MOHANTY
Director of Information & Public Relations

Editor
B. B. PATNAIK

Assistant Editor
PRAHARAJ S. N. NANDA

Associate Editor
S. K. PATNAIK

Cover Design
ASIT MUKHERJEE

* * *

Publisher
Information & Public Relations Department
Government of Orissa
Bhubaneswar

Printer
Orissa Government Press
Madhupatna, Cuttack

Subscription : *Annual—Rs. 6·00, per copy* : *Re. 0·50*

* * *

ORISSA REVIEW seeks to provide a condensed record of the activities and official announcements of the Government of Orissa and other useful information. Many items appear in summarised form. Such items should not be treated as complete and authoritative versions.

Although published on behalf of the Government of Orissa, Information & Public Relations Department, the views in the items expressed in the 'Orissa Review' are not necessarily those of the Government of Orissa.

IN THIS ISSUE

Better Planning Greater co-ordination needed for integrated growth. 1

Prime Minister's 12-point Programme for Drought Management. 5

Telecommunication Services in Orissa 7

The youth needs a genuine friend .. 10

Command Area Development .. 13

KARMA : The tribal folk dance of Orissa. 17

Geothermal Energy ... 22

Financial discipline—a problem in small scale sector in Orissa. 25

Problems of the Deaf in our society ... 29

The musical tradition of Pala and Dasakathia. 34

Better Planning and greater coordination needed for integrated growth

SHRI K. S. RAGHUPATHI
Adviser to the Governor

Shri K. S. Raghupathi, Adviser to the Governor of Orissa, in his address at the Seventeenth Foundation Day of the Regional Research Laboratory emphasised on the need of better planning, greater co-ordination and the need for the scientists and technologists to devote attention to the problems of integrated and balanced development for removal of poverty and un-employment.

The address of Shri Raghupathi is reproduced below for the benefit of our readers.

EDITOR

For me science and technology and removal of poverty and unemployment have been of the greatest concern for almost thirty years now. I traversed almost the entire mineral laden Eastern region to select the sites for what are now the Rourkela, Bhilai, Durgapur and Bokaro steel plants. We had to choose the sources of supply of iron ore, metallurgical coal, lime-stone, dolomite and manganese, plan the raising of these minerals, their beneficiation and their transport. There was enthusiasm and close co-operation among the survey and exploration agencies, the research and development laboratories, the plant consultants, the railways and the planning organisations. The setting up of the first three Steel Plants in the public sector during the fifties was a challenge but most facinating. It was the beginning of the age of technology in India.

Almost 3,000 scientists and engineers were trained mostly in the Soviet Union, the United State. Britain and Germany. There were almost eighteen thousand skilled workers trained in the steel plants in Jamshedpur, in Burnpur and abroad. Even as the foundations of the steel Industry were laid, steps were taken to also create manufacturing capacity within the country to build steel plants. The Heavy Engineering Plant at Ranchi, the coal Mining Machinery Plant in Durgapur, the Heavy Structural Plant in Naini, the Plate and Vessel Works in Vizag and many of the heavy electrical plants which today constitute the Bharat Heavy Electricals came out of this urge to be self-reliant. Research and Development Laboratories were enlarged and strengthened and new laboratories set up. Nuclei of design and consultancy facilities which had been created in Rourkela and Bhilai, grew to become what is now MEECON in Ranchi.

A country like India must first have a strong base of heavy industry and communications to stimulate and spread industries to provide employment to the growing numbers who join the labour force every year. India must be strong, must be secure against foreign aggression—territorial and economic—to meet the challenge of unemployment and that capacity to manufacture was not enough for self-reliance· India had to have a strong research and dovelopment base.

Technology is not mere innovation not just tools and machinery. It goes beyond and brings about far reaching changes in the organisation of trade, in patterns of consumption, in the entire social system. In orienting research and development, in introducing a technology, one must be profoundly conscious of the likely social and economic changes. One must compete to survive. One must also innovate for the benefit of the people of India. But, in the end, progress, in whichever be the field of human endeavour, must be measured in the good it does to mankind; in the good it does to mankind; in the good it does to remove proverty and unemployment; in the good it does to improve the quality of life of the masses.

The crisis of 1964 sharply reminded us all that while the country needs a strong industrial base, it needs even more a strong agricultural base. Agricultural base in the wider sense of use of land for the production of crops wood for fuel, timber for housing and industry, animal husbandry and fish farming. The sheer magnitude of the problem of unemployment and poverty called for greater emphasis on rural development. The message was loud and clear that planning for employment cannot lean merely on industrialisation nor cannot it lean on technology or skills from outside the country. Greater attention has to be paid to afforestation; soil and water management; to greater and better use of land and to renewal of the renewable natural resources in order to secure the objective of providing employment to all.

I was fortunate to come back to Orissa for a few years but even more fortunate to be away from the Capital. It gave me the time and opportunity to study in greater depth the problems of poverty and unemployment and undertake new programmes of rural employment. It is then that I realised more than ever that no skill, no instrument, no process introduced in to a society will remain "neutral". Any innovation will have far reaching consequences on people's lives and will affect their employment or lack of it.

It is my good fortune once again to return to the Eastern region of India. On the first day of my coming to Orissa last month, there were three cases which came before me which I believe, are pointers to the need for better planning, to the need for greater co-ordination and above all, to the need for the scientists and technologists to devote their attention to the problems of integrated and balanced development in order to remove poverty and unemployment.

The Eastern region is rich in minerals. processing of these minerals is highly capital and power intensive. One begins to wonder whether with growing difficulties in generating electrical energy, one can afford to use so much of this relatively scarce and expensive form of energy to smelt ores in preference to using that energy for purposes of irrigation and for running industries which have greater employment potential. This is a problem to which, not only planners and economists but also scientists and technologists must turn their attention. I think one must think of alternative forms of energy to smelt ores.

In the second case there were competing demands from different districts for location of industries. Passions were aroused about balanced development of the different regions of Orissa. This points to the need for programming research and development activities in such a way as to use the resource endowments of each district to its best advantage and to accord priorities to satisfy the claims for balance in the development of the different districts. One cannot have a steel plant in every districts nor can one have marine fisheries regionally spread. A lay man like me can say that broadly the districts in the North which have mineral resources would rely on minerals for employment and growth oriented industries. Similarly, the coastal districts would rely on marine and Inland water resources and on paddy, jute and similar agricultural crops. The hilly districts of the South and South-West could be developed with forests and plantations as the primary base and may be some of the other districts can have horticulture and cash crops like cane and cotton as the resource base. It is for institutions like the Regional Laboratory to refine and develop these ideas further and to draw up priorities in research and development to promote more balanced development of the different areas.

The third case reinforced my fears that water is the scarcest commodity of all, not withstanding the fact that the eastern region excels the other regions in its records of rainfall and floods. All the water runs off in a matter of three to four months. Not only is most of the region parched during the remaining months but the little water that one finds is polluted. I do not know the charter of the Regional Research Laboratory; but it seems to me that with all the talent, with such distinguished scientists and technologists devoting their attention to the problems of the region, it should not be difficult for the Laboratory either on its own or in co-operation with other organisations to go in to the problems of conserving water for the lean season and keeping it free from pollution.

While on the subject of water, it strikes me that although it is not so much the function of the Regional Laboratory but more of an organisation like the Industrial Promotion and Investment Corporation there is urgent need for a plant to be established in Orissa to manufacture drilling equipment designed to rapidly bore wells in the different types of terrain.

I am proud and I am sure everyone in the Eastern Region will be proud of the excellent work being done by the Laboratory.

* * *

DISTRICT CREDIT PLAN FINALISED

163 CRORE ACTION PROGRAMME FOR 1980

Under District Credit Plans, Orissa would get credit support to the tune of about 163 crores during the current year from the Commercial Banks. To bring about the desired participation of Commercial Bank in the State's development in various sectors, lead bank scheme was introduced. According to distribution the State Bank of India became the lead Bank for the districts of Koraput. Kalahandi, Bolangir, Phulbani, Sambalpur and Sundargarh, the United Commercial Bank for Balasore, Dhenkanal, Cuttack and Puri, the Bank of India for Mayurbhanj and Keonjhar while the Andhra Bank became the lead Bank for the Ganjam district.

The action programme prepared by the State Bank of India envisages the extent of credit support of Rs. 1,103·67 lakhs for Koraput. Rs. 624·89 lakhs for Kalahandi, Rs. 1,111·38 lakhs for Balangir, Rs. 1,312·43 lakhs for Phulbani, Rs. 19,72·48 lakhs for Sambalpur and Rs. 436·18 lakhs for Sundargarh.

The United Commercial Bank will give credit support of Rs. 1,339.39 lakhs for Balasore. Rs. 728'13 lakhs for Dhenkanal, Rs. 2,477·00 lakhs for Cuttack and Rs. 1,574·64 lakhs for Puri.

Similarly, the Bank of India will give credit support of Rs. 894·77 lakhs in Mayurbhanj and Rs. 518·26 lakhs in Keonjhar, while the Andhra Bank's credit support will be of Rs. 2,229·02 lakhs in Ganjam district.

AWARD OF CASH PRIZES TO THE POST OFFICES AS INCENTIVE FOR SMALL SAVINGS COLLECTIONS

The State Government have decided to award cash prizes to the Postmasters of Head Post Offices, Sub-Post Offices and Branch Post Offices in the State from the year 1979-80 as incentive for mobilisation of Small Savings Collections.

The best Head Post Office at the State level will get an award of Rs. 400 The best Sub-Post Office in each district will get Rs. 200 and one Branch Post Office each in all the 13 districts will get Rs. 100.

The cash awards introduced by the State Government from the year 1979-80 basing on the performance during the year 1978-79 to be followed up annually in future.

The selection of Post Offices for such cash awards will be done by the Postmaster-General, Orissa.

INCENTIVE TO SMALL SCALE INDUSTRIES –UNIFORM PROCEDURE FOR RAW MATERIALS SUPPLY

Government of Orissa are considering a number of steps to provide better incentives to the Small Scale entrepreneurs in a bid to ensure rapid industrial growth.

Various ways and means to adopt an uniform procedure for settlement of stone quarries and to make available raw material like cashew kernel and sisal fibre were discussed on April 10th at a meeting convened by the Commissioner-*cum*-Secretary, Shri P. Tripathy in which representatives of the Forest, Revenue, Soil Conservation and Finance Departments attended. It was indicated in this meeting that the local entrepreneurs find it difficult to procure the raw materials since the lease of stone quarries, cashew plantation and sisal plantation are controlled by different Departments who have formulated procedure of their own. In order to overcome these difficulties, it was decided in the meeting that the small scale entrepreneurs recommended by the District Industries Centre should be given preference in the matter of supply of raw materials.

Prime Minister's 12-Point Programme for Drought Management

The Prime Minister, Shrimati Indira Gandhi has outlined a 12-point programme for dought management.

The programme envisages appointment of full-time relief officers in the districts most seriously affected by scarcity of food, employment and/or drinking water; daily monitoring of the situation in regard to food, employment, starvation and drinking water; availability of food-grains with adequate stocking of the F. C I, depots and opening of fair price shops at the rate of one shop for 2,000 persons.

The programme calls for deterrant action against anti-social elements like law breakers, black marketeers, profiteers and hoarders. and continuity of Food-for-Work and mounting of a massive plantation of trees in the drought affected States·

Other points of action in the Prime Minister's Programme stipulate setting up of a feeding centre in every panchayat circles for children, nursing mothers, pregnant women and the destitutes who cannot be employed, preparation of contingency plans for supply of water to the identified villages, use of rigs of all departments and of all types for boring drinking water wells and opening of cattle camps and relief camps near water sources at short notice.

Rao Birendra Singh has told the Governor and the Andhra Chief Minister that the Union Government is proposing to send Central Teams to the drought affected States for assessing the situation as and when requested for by the States.

The 12 points, in detail, are as follows.:—

(1) Full time Relief Officers

The districts likely to be most seriously affected by scarcity of food employment and or drinking water should be identified and full time Relief Officers appointed immediately to assist the District Officers. (The District and the Relief Officers should be handpicked and proven for their devotion to work and to the cause of the suffering poor. Adequate incentives may also be given). Relief operations should involve all departments.

(2) Monitoring

Daily monitoring of the situation in regard to food, employment, starvation and drinking water should be conducted at the state level for each district and at the district level for each village or panchayat and timely action taken.

(3) Availability of food-grains

While efforts should be made that all godowns of the Food Corporation of India should have adequate stocks of food-grains, the State Government should open buffer godowns in seiriously affected blocks and ensure that no area suffers from non-availability of food-grains. Movement and despatch plans for food-grains should be finalised in consultation with the State Government by the representative of the Food Corporation of India and followed up daily in joint meetings by the representatives of the State Government, the Food Corporation of India and the local Railways.

(4) Fair Price Shops

Fair Price Shops at the rate of one shop for 2,000 persons should be established through private or public agencies and supplies of food-grains, sugar, edible oil and kerosene arranged through them. Assistance of banks should be ensured.

(5) Anti-social Elements

Continuous legal, administrative and social pressure be mounted against law breakers, black marketeers and hoarders and deterrent and demonstrative action taken against all such anti-social elements who try to exploit the scarcity situation.

(6) Food-for-work

Continuity of Food-for-Work should be ensured by a shelf of schemes at the panchayat circle level and continuty of payment within a week ensured by availability of food-grains and on account payment if measurement of work done is likely to be delayed.

(7) Afforestation

A plan for massive plantation of trees should be mounted as a compaingn in the drought affected States. This should comprise arranging nurseries and digging of trenches, pits, boundary walls, etc. for afforestation. The compaign should be given a high priority in the Food-for-Work Scheme. Enhanced targets for plantation in the degraded areas of the reserved and protected forests as also on community land canal side and road side areas should be taken up on the onset of monsoon in continuation of the scheme of employment.

(8) Food for Nutrition Programme

Free food-grains had been offered to the States for feeding the destitutes, etc., but very little of those has been utilised. Every Panchayat circle must have a feeding centre for children, nursing mother, pregnant women and the destitutes who cannot be employed. Skimmed milk powder and edible oil should also be utilised.

(9) Contingency Plans

Contingency plans for supply of water to the identified villages should be drawn up and advance action taken for arranging tankers, trucks, drums, diesel, etc.

(10) Public Health Measures

All available, public and private, sources of water should be protected, impounded, disinfected and expanded to cover as many villages as possible.

(11) Rigs for Boring Drinking water Wells.

Rigs of all the departments and of all types along with the crew should be mobilised on a war footing and used for boring and deepening of wells in the most seriously affected areas.

(12) Cattle Camps & Relief Camps

Sites of cattle camps and relief camps near water sources should be identified and advance action taken for opening them at short notice.

Telecommunication Services in Orissa

SHRI K. K. MATHUR

The importance of Telecommunication services for any Society cannot be overemphasized. "If trade is the life-blood of an economy, the Telecommunication can truely be regarded as the nervous system of both the economy and the Society". Access to a two-way instantaneous telecommunication network increases the efficiency of production, distribution and commerce of essential commodities required by the Society. Apart from the service that it renders to the development of national economy, telecommunication facilities play an equally important role in providing support facilities for essential services and emergency situations like law and order natural calamities, fire, sickness etc. However, telecommunications has its own place in the list of national priorities and this puts a constraint on the available resources for the development of telecommunication facilities in the country. Happily, the importance of telecommunication facilities are being appreciated by the nation and it is to be hoped that these facilities will develop in future.

The State of Orissa has been witnessing a fast rate of growth of telecommunication facilities since independence. At the time of Independence, there were only three telephone exchanges with about 450 telephone connections, one Departmental Telegraph Office and about 70 Combined offices in the State. Today the State has 170 telephone exchanges with over 30,000 telephone connections, 3 Telex exchanges, 3 Central Telegrapn Offices, 9 Departmental Telegraph Offices and over 800 Combined Offices providing telegraph facilities even to the remote corner of the State. The number of telegrams handled in a year is over 13 lakhs. This indicates the steady growth in the telecommunication facilities though the growth can by no means be termed as as phenomenal The telecommunication authorities of Orissa have been trying hard to keep pace with the ever-encreasing demand of telecommunication facilities in the State with the result that the telephone waiting list in the State is one of the smallest in the country. Efforts are being made to reduce even this small waiting list in as short a period of time as possible.

In addition to to the large number of telephone connections provided to the public through the various local telephone exchanges, constant effort has been afoot to increase the long distance trunk facilities to the subscribers. Today twenty-six "Manual Trunk exchanges" linking the various telephone exchanges in the State, put through, on an average, over 45 lakhs trunk calls a year. Demand Trunk facilities are available from the State Capital (Bhubaneswar) to almost all the District Headquarters towns in Orissa as also the National Capital at New Delhi. Similar facilities to other important towns inside the State are also available. "Subscriber Trunk Dialling" service to over 40 stations in the country are available from Bhubaneswar, Cuttack and Rourkela through the Calcutta "Trunk Automatic Exchange". Many more such stations will be brought under the S. T. D. map in the near future. A Trunk Automatic Exchange is also planned for Cuttack which will facilitate direct dialling within the State.

With a view to take the telecommunication facilities deep into the rural and tribal areas, the P. & T. Department adopts very liberal policies towards opening of P. C. Os. in small villages, whether such a project is remunerative or otherwise. As a result, today we have over 470 such Long-Distance P. C. Os. in the State (as against five at the time of Independence) and more and more P. C. Os, are being opened within the constraints of the resources available. The opening of such P. C. Os. however posses some problems in districts like Koraput because of difficult terrain, high voltage E. H. T. power lines, difficulties of maintaining overhead lines, etc. In view of such handicaps, the P. & T. Department has been examining various technological options for providing automatic round-the-clock telephone service to these rural and tribal areas. The options under consideration are, provision of electronic and digital small telephone exchanges, UHF/VHF facilities for long distance connections etc. Koraput has been chosen as one of the districts where such modern technological options will be tried and may serve to become a "MODEL RURAL TELECOM NETWORK".

There is an ambitious programme for the future development of telecommunication facilities in the State. The capacities of the telephone exchanges at Bhubaneswar, Cuttack, Rourkela and Balasore are being substantially augmented to reduce the waiting list of subscribers at these stations to a minimum. Efforts are also afoot to convert the Manual Exchanges at all the District Headquarters into Automatic Exchanges. More and more "Small Automatic Exchanges" are being planned at various places where there is a minimum demand for 10 telephone connections, To facilitate better trunk service more and more long distance transmission media like, 3 and 8-channel open wire systems, coaxial cable systems (interstice pairs), UHF/VHF links and spur routes of Microwave links are being planned and implemented. About a dozen VFT systems are proposed to be commissioned this year to facilitate the Telex service and the point-to-point leased T/P circuits.

Paradip is an important Port of the State of Orissa and the P, & T. Department, with a foresight, had planned and implamented a UHF link to this town. This will now come in handy for providing National Trunk Service to this important town. A 400-line MAX-II telephone exchange and a 20-line Telex exchange is also proposed to be opened here.

Not to be left behind in the introduction of new type of modern telecommunication facilities, the Telecommunication authorities in Orissa are also planning the introduction of services like 'Fascimile" and "Data Transmission". These facilities provide the option of "Telephoto" of fast transmission of pictures of routine documents. Data transmission provides communication facilities between computer and its terminals. P. & T. Department is also executing an amitious project called the "Indian National Satellite Project". An earth Station of this Project will be located near Bhubaneswar, and will provide stable telephone circuits to Delhi, Bombay and Madras.

As telecommunication facilities expand. both in number and sophistication, so also does the desire and expectation of the subscribers for perfection in the quality of service. Unfortunately, however, the efficiency of an operational service like P. & T. is judged more by its failures (howsoever small its percentage) rather than its success (howsoever large its number). This, however, is the price any professional service has to pay for the very nature of its operation. I hasten to add that I should not be misunderstood as trying to defend the shortcomings of the maintenance of telecommunication facilities. My humbly submission is that the service, though far from being ideal, is not really as bad as it is sometimes made out to be. The authorities are always keeping a constant watch over the maintenance of these facilities and are trying their best to provide as good service to the public as is possible within the constraints in which they are working. I hope that, with the proper co-operation of and co-ordination with the users of these facilities, we will be able to provide ideal telecommunication facilities to the public. This, in any case, is our aim, objective and motto.

◆

General Manager,
Orissa Telecommunication Circle,
Bhubaneswar.

COMMENDABLE PROGRESS UNDER FOOD FOR WORKS PROGRAMME
891 LAKH MAN-DAYS GENERATED

Orissa Government have been implementing the Food for Work Programme with unabated vigour and the progamme generated 891·08 lakh additional man days of employment by utilising 4·09 lakh tonnes of food grains in course of 3 years of the operation of the scheme since 1977-78. In terms of money the Programme, provided Rs. 59 crores to the State budget additionally.

According to the latest report available, the State Government had received 2·31 lakh tonnes of food grains under the normal as well as special food for work programme during the year 1979-80. With a carry over stock of 26,000 tones of food grains from the previous year, the total availability of foodgrains during 1979-80 under this programme was 2·57 lakh tonnes out of which 2·05 lakh tonnes were utilised during the year. The programme had been immensely helpful to the State Government not only to maintain the public works in rural areas but also to mitigate the hardship of the wage earners belonging to the weaker sections of the community by providing employment in their villages or nearby areas. Public Works of permanent nature like school buildings, roads, drinking water wells, soil conservation programmes have been undertaken in the rural areas.

The State Government have received an allotment of 6,000 tonnes of foodgrains under the food for Work Programme on March 31, 1980 for execution of labour intensive works. The district wise allotment is as follows:

Sambalpur ..	1,500 tonnes	Puri ..	650 tonnes
Ganjam ..	470 tonnes	Koraput ..	500 tonnes
Balasore ..	100 tonnes	Sundargarh ..	200 tonnes
Cuttack ..	500 tonnes	Kalahandi ..	500 tonnes
Balangir ..	800 tonnes	Mayurbhanj ..	80 tonnes

The allotments were made keeping in view the requirements of the districts as well as in consideration of the foodgrains available with them. The National Highway Organisation and Community Development Department have been alloted 500 and 200 tonnes.

The youth needs a genuine friend

SHRI AMAR SINGH, I.A.S. (Rtd.)

There is student unrest in our country. Is there a solution to stop this unrest? What are the reasons that lead to this unrest ! The modern youth is restless. He is often criticised adversely.

The students are not satisfied with their present system of education. They do not want to appear in examinations. They want to choose their syllabus, their professors and their pace of progress. They don't get jobs. They wander about in the streets only to get deep pain and frustration. They want to share their political rights. They want to exercise their franchise. They want to reform the present social order. They want to share responsibility with the managements. They see that the war between the capital and labour is getting acuter day by day. They question the very basis of the present society. They see that millions of people are still daily smothered by poverty and starvation. They therefore rise to cry against all establishments and want to destroy injustice, and the present intolerable order and when no body listens to them they break into violence. They gherao their Teachers, Principals, Vice Chancellors to achieve their end. They go to the Ministers. They go to Courts. And everywhere they go, they are treated as nuisance and as persons that are most unwelcome. They are pushed aside as indisciplined urchins. At this stage, the different political parties pick them up and keeping their gun on their shoulders, fire. The shot brings about chaos. Dark forces come into play and the hooligans take full advantage to indulge into arson, loot, murder rape, burning of the national properties like the schools, colleges, buses, stopping of the trains and all the nefarious activity that one can think of, starts raising its head. The Governments come up with their lathis and other lethal weapons to control violence and disperse the mob. In the bargain precious lives are lost, the normal life is disrupted and the country goes out mourning with all kinds of speeches hurled at the students, their parents and teachers. And often the total blame is put on the shoulders of the parents and the teachers deprecating their indifference to handle their wards on proper lines. This is the whole story.

I do agree that it is improper for the students to participate in violent activities and in many cases I also find that they come out with unreasonable demands but the question is—has anybody cared to go deep into the malady ? Has any body critically examined the unrest to find out the causes ? Has anybody tried to give relief ? Are students really going the wrong path ? Has this been established beyond doubt ? Do we share their problems ? Are they truly understood ? Do we share their aspirations ?

It is explained that in the present age of reason and advancement the generation gap is playing its part and the younger generations do not understand properly the elder and so, there is rub. The Governments dismiss the youth unrest on the ground that it is not a localised problem. It is a global problem and all over the world students have become restive and violent without any apparant cause. But is it correct ? The explanation does not seem to be satisfactory.

When we look round the socialistic countries which form one-third of the world we see that student unrest is almost nil in all those countries. There food, lodging, medicine, transport, education, electricity, the services of a doctor, etc. are not expensive. They are available and are within the reach of every human being. The health of a student and his education in fact are the prime concern of the Governments.

In our country, the universities, colleges, schools remain closed on several occasions during the course of the academic year due to strickes and unrest of the students. And when the doors and windows are smashed, police some times have to open fire. Now the question is why such things don't happen in the countries that run a socialistic pattern of Government. The answer is simple. In those countries the difficulties of the students are appreciated and timely action is taken to remedy them. Take the case of East Germany, which was razed to the ground during the last world war, like Japan it has resurrected itself so quickly by swift reconstruction work that one is amazed. The students there have an organisation called the Independent German Youth. Their President Egon Krenz said in an interview in 1974 that East Germany had no student problem because the attitude towards the problems of students was that of appreciation and creating goodwill. Whenever any problem arose or as posed by students, it was immediately solved to the satisfaction of the students community. And the result always was that the students collaborated with the East German Government in the reconstruction work of that country and today in the entire world, East Germany stands as the 8th big industrial area. The student community has the right to give their opinion to their Government. They have their right to get proper education. The student community according to Egno Krenz, play a very important role in the political set-up. Here is a picture of East Germany in 1974 : 42,000 students were working as elected deputies in their parliament, District Assemblies and in the Municipal Committees. In all the assemblies, wherever they were in the country, 20 per cent of them were manned by students. An East German, if he was 18 years of old, was allowed to exercise his franchise. Between 18 and 20 years of age, 8,000 students were working as members on the different representative committee. This Independent German Youth Organisation had 49 members in the country's Parliament, where no decision was taken unless this youth organisation was consulted. The students were thus taking active part in the law making process and also in the decision making process of the country.

In East Germany the Government have to provide the students with schools, employment, sport and leisure and in return the students undertake to give full collaboration in the building up of the country. Laws have been farmed in this respect and students see that this law is fully implemented. The Headmasters, Principals and the Vice-Chancellors have to sit down with the student members to find out how the difficulties with which they are faced have to be solved to the satisfaction of all the parties concerned and in the interest of the country. The students decide about what hostel improvements have to be done : what improvements have to be done to improve the standards of sports and how aid has to be given to different sections of their community and these problems are carefully examined. All parties sit together to decide them to the satisfaction of all concerned.

The students draw out a manifesto of what they want, why they want it and how should they get it. This manifesto is then circulated to the public for their consideration and scrutiny. Debates thereafter are held all over the country on points involved and then it is put in Parliament for acceptance, modification or alternation and whatever is approved by Parliament becomes final and it is implemented without any rancour. The students are required to undertake to improve production, to improve their standards of education and progressively show improved results in their examinations. This encourages the industries also to pay more.

Now this has been one method to solve the student unrest from the objective point of view. In our country the students want to pull down the present structure. Has anybody examined why do they want to do so ? By simply pushing the problems with a wave of the hand will not any more do. The common slogans that the students have become indisciplined, that they have no respect for the elders and that they are a prey to party politics will not do. We have to go deep into their allegations. And if we do so we will invariably find that they have some real trouble and unless it is removed, no patch work or compromise will improve matters. The students want a radical change in so many directions. We should have the patience to hear them, appreciate them and take them into our fold to give them relief however expensive or costly it may be. They are the future custodians of the country. We have to train them properly and this training programme has to be chalked out with their collaboration. Only then the student unrest will stop. Is it not the right of a student to know, what is his future in our set up ? In the schools and colleges, the students should feel that the institution belongs to them and they are a part of it. Circumstances will have to be created for this feeling. Then only the student-unrest in schools and colleges will disappear. Let the students feel their responsibility. Then only they will devote their time to useful activity.

The modern youth is in need of a real friend who can truly understand him. He doesn't need a preacher or a moralist or a religionist.

The fantastic success of science and technology has so tremendously influenced the modern youth that he has became egoistic. He now believes in the omnipotence of man and thinks that he can transform the present order to something new. So with unbounded enthusiasm he impulsively indulges in various activities to achieve his end; but the more he tries the greater is his confusion and all his efforts land him in a situation that has neither any aim nor any plan. He ultimately finds that he is not able to solve his problems. Little does he know that the sad situation arose out of his own ignorance and owing to his disregard of the omninotent and omnipresent force that really works in the world and without whose assistance and grace nothing moves. One can experience his grace by aspiring to rise above his surface consciousness to go higher up his highest consciousness.

It is, therefore, expedient first to create in the students a conviction in the existence of that Force working in themselves and the world and it is with the help of this force only they can proceed in life to undertake and execute their work. Along with this a proper sense of value has to be generated in them to valuate what is good and what is bad for them, the society, and the world. Simultaneously they should be inspired to formulate a noble and lofty aim or aspiration in life the fulfilment of which will make them truly happy and untie the knots of the various problems that confront them today. This will again produce in them a sense of propriety urging them to create rather than to destroy. The Government or the authorities concerned, therefore, should give them all the required facilities during their educational career which *inter alia* should place before them such environments that suggest a code of ethical and spiritual conduct based on Indian culture. This should operate right from the primary stage and go up to the University stage to enable them again to lay themselves on a stable and sound foundation. The edifice of their future on such a sound foundation is bound to project a true vision of life.

(See Page 24)

COMMAND AREA DEVELOPMENT

SHRI K. SRINIVASAN, I.A.S.

The concept and the action programme

The concept to tie up the irrigation system and the agriculture programme is the basis of "Command Area Development". This concept has been developed by the National Commission on Agriculture into an action programme comprising five aspects, viz:

(*a*) Modernisation of the existing irrigation systems to allow for effectively controlling irrigation in blocks and reducing line losses and extending benefits to larger areas on the principle that—

  (*i*) in abundant water areas maximise the number of crops and their intensity;

  (*ii*) in medium availability of water, increase the productivity per unit of water;

  (*iii*) in water scarce areas ensure protect tive irrigation to the major crop in the area.

(*b*) Ensure that each field has a controlled inlet for irrigation.

(*c*) Ensure that each field has a controlled outlet for drainage connected to a master drainage system for the project:

(*d*) Land shaping between the inlet and outlet in every field to ensure that the best scientific principles of water retention and water drainage to suit the irrigation conditions and soil capacity.

(e) Evolve a suitable cropping programme for the area keeping in view the principle of water utilisation mentioned in (a) above.

Optimum Systems Design

The principles of water use outlined above cannot be implemented unless the water supply in the canal systems can be effectively controlled to give the required amount of water at a canal head within a required time. In most of the systems the Kharif command is several times of the Rabi Command. Besides, the amount of water for a given area in Kharif is different from that in Rabi. Thus the irrigation engineer is faced with a problem in the two seasons when differential irrigation rates and allowances are to come into play.

Conveyance losses

The line losses of water from the head to the field is as high as 45-50 per cent depending on the nature of the soil and the predominance of fillings over cuttings. The Irrigation Commission and particularly the National Commission on Agriculture has drawn attention to the need for judicious use of lined channels from the head reaches to the field so that line losses can be minimised. It has by now been accepted that lining of channels is necessary for saving water. At what pace this is done will have to depend on the local situation, the difficulties and the economics of the project. At the same time, it has to be noticed that both Punjab and Haryana have now opted for complete lining of all their channels right upto the field. No doubt, water is a very precious commodity in Punjab and Haryana with their aggressive agriculture and limited water resources. Areas better endowed with water have a tendency to waste water and may not realise the importance of saving water in the canal systems. Tamilnadu which is now suffering from water shortages has finally taken to lining of channels.

Field Channel System

Water control and moisture control on every field is essentiai for good agriculture. The National Commission on Agriculture has drawn attention to the fact that in most irrigation system there is field to field irrrigation from canal heads with supply of a large amount of water. As a rasult the crops are damaged by excess water rather than benefited by it. Therefore in command area development, importance has been given to a separate field channel for every field and a separate drainage from every field so that the owner of the field can control the moisture regimen on his field. For proper moisture control land shaping of every field is essential. The land shaping has also got to be fieldwise but fitting into an overall flow system This principle has been accepted. The main difficulties in command area development arise out of the implementation of this very useful and necessary condition. The thinking is now veering to constructing the channels as a part of the programme itself but recovering the costs from the farmers. This is a healthy development.

Land Consolidation

Fragmentation of holdings is the biggest bane in irrigated agriculture which leads to firstly loss of land in the boundaries and secondly inability to follow an intensive programme of agriculture. Consolidation of holdings has been suggested as the natural remedy for this problem. Whereas in theory consolidation for flat lands was accepted as a possible venture, the revenue exports were not willing to consider consolidation of holdings in undulating terrain. The problem raised was the differing qualities of the land in undulating terrain which made proper allocation of chaks difficult. For a long time it was considered that this objection was tenable. Buf after the detailed land shaping and drainage works done under the Tawa Project of Madhya Pradesh in heavy black soils it is now evident that in many undulating areas the right answer to better agriculture is consolidated. The formation of chaks under undulating terrain will have to be different from that on plain land. The fields will have to be constructed between the ridges and the valleys on a graded bund system so that in rainfed or irrigation agriculture the water flow is even and dose not stagnate. At the same time, moisture retention is controlled. In such a system of chak formation, it is quite easy to reduce the number of classification of a land for allocation of chaks. This realisation has now come to those working on this problem. There is therefore, a willingness now to go sheed with consolidation. The only difficulty is that the cost of consolidation is rather excessive and this may lead to objections from the farmers. Recently a decision has been taken that both the Centre and States will contribute towards the cost of consolidation thereby minimising the cost the farmer will have to bear. It is hoped that this wll step up the programme of consolidation. This is a necessary step towards command area development.

There is a conflict between the consolidation proceedings and the proceedings for channel formation If the channel formation is done before the chaks are formed, then the whole system has to be reorganised when in the consolidation new chaks are formed, and new plots are assigned to the farmers. A question was therefore, raised whether this double expenditure was necessary or the channel formation should await completion of consolidation proceedings.

Orissa has shown the way. The consolidation programme is preceded by topographical (contour survey) and alignment of field channels. The area required for field channels are kept "Reserved for Public use" and the rest of the cultivable lands are covered by the consolidation scheme.

Optimising crop intensity and Warabandi

In most irrigation projects in the country sufficient water for the command is available only during the rainy season. The rabi command is normally only a fraction of the kharif command even though the water requirements per acre of rabi crops is much lower than that of kharif crops. Only major reservoir projects have got water for a summer crop. But most of this available water is pre-empted by sugarcane or reserved for giving a seedbed watering early in the kharif season. The rabi season crops all over the country are much more remunerative than the kharif crop. It is therefore, obvious that all steps have to be taken to ensure that we plan the best acreage for rabi and summer as is possible within the irrigation systems. One of the methods suggested is to stop water for seedbed in early kharif and utilise all the reservoir water for a rabi and a summer programme to be completed before the end of April. Thereby the heavy evaporation in the months of May and June in our reservoir systems can be saved. The seed leeds can be developed usefully on an individual or a community basis under tanks and wells in the village. Theoretically, this programme has been accepted. But the biggest contributor to a successful rabi and summer programmes will be ground water exploitation within the command area. An important ingredient of command area development is ground water supplementation can be either by State tube-wells or private tube-wells and wells giving additional water to the farmers' crops directly during rabi and summer. It can also be supplementing the tail ends of the canal system with State tube-wells pumping the ground water in to the canal system for rabi and summer utilisation at the tail ends. Thereby the water available in the main project can be utilised at the top reaches of the command thereby saving quite a lot of line losses. Theoretically this has also been accepted.

The main ingredient of command area development is organising an agricultural programme for getting the maximum result out of the irrigation waters. It is, therefore, clear that there has to be a systematic development of the various phases of command area development so that the end product may be suitable crop plan. At the same time, the crop planning should be well in advance of the other operations because the modernisation itself will depend upon the cropping potential and the capacity of the farmer to adjust to a water routine. The main difficulty in drawing up a suitable programme is persuading the farmer to adopt new crops in new seasons. A suitable extension structure is a necessity. It has now been decided that the Benoir system of extension suitably modified should now be introduced all over the country, particularly in the command areas, in order to develop a suitable cropping programme.

Mixed Farming

Command Area Development does not end with the water management and the crop planning. It has been established that a farmer gets maximum return out of land by following a mixed farming Pattern. Not only crop production but animal husbandry, fisheries and forestry should be built in to the economy of the farm household so as to maximise the returns from the holdings. As a first step towards this, a national programme of milk production has been introduced through 'Operation Flood' programme and has been repeated in certain World Bank aid programmes in selected States. This programme seeks to supplement the income of small and marginal farmers households and agricultural labour households by maintenance of good milch buffaloes or crossbreed cows. The by-products of agricultural crops and specific fodder production as a supplement, where necessary, enable such farmers and labourers to get a good supplementary income out of a milk economy. Recently a programme of fodder trees has been experimented which seems to have a high potential. If this development can be made in the common grazing lands of the village with special link up with small and mariginal farmer households and agricultural labour households, the irrigation system can enable intensive fodder development and substantial benefits to the households in milk production. Now that the work of water management has been solved in more than six lakh hectares, it is time to expand effectively the milk production programme in these villages.

Pisciculture

Another important subsidiary occupation that arises out of the irrigation system is fresh water fisheries. In several of our major irrigation systems particularly in the black heavy soil areas the Kharif offtake of water is much below the capacity of the system. Thereby available water is wasted in overflow. In these areas, in the depressions, because of waterlogging, cropping becomes difficult. Even otherwise with the technology available to us, one hectare of composite major crop culture will give a level of profit which cannot be attained by agricultural crops in the best of lands under the best of conditions. In view of this, considering the need to put land to the best use, an aggressive pisciculture programme in the command areas seem to be the logical development.

COMMAND AREA DEVELOPMENT IN ORISSA

Establishing Command Area Development Authorities.

Four Command Area Development Authorities were established in 1975-76 with headquarters at Cuttack, Puri, Bhadrak and Sambalpur. These four CADAs cover in all about 5 lakh hectares of irragated areas of the Mahanadi Stages I & II the Salandi and the Hirakud canals systems.

Work done so far

Agriculture & Co-operation—The CADAs have been concentrating on agricultural programmes. They are funding demonstrations to persuade the farmers to take to a three crop pattern. Our demonstration work in this regard has received laudatory comments at all India level. Funds are also provided to assist co-operative institutions. Loans to farmers to become members of co-operative subsidy, managerial assistance to Central Co-operative Banks, Land Development Banks, etc., Risk Fund are some examples.

Field Channel demonstrations—In all the four CADAs large number of demonsrtations have been laid out to show to the farmers, the advantages of this system. This work also has attracted praise at All-India level.

Commissioner,
Command Area Development

Consolidation—The Consolidation organisation has taken up a widespread area for its operation. The aim is to cover the entire irrigated area by consolidation programme. Before the Consolidation scheme is finalised, agricultural engineers do a detailed contour survey of the lands, draw up alignment of field channels and these data are incorporated in the maps so that the concerned landholders have these data also before them so that they can file their objections if any before Officers of Consolidation Organisation. This is a unique feature of consolidation programme. No other State in India has such a scheme. Orissa is, in this sense, leading the country.

Construction of field channels etc.—Our experience has been that people are unwilling to construct field channels at their cost. A proposal for Government themselves to construct the field channels is under active consideration.

Conclusion—Mixed farming on irrigated land has to give substantial labour opportunities to the unemployed and under-employed labour in the rural areas. Where Irrigation for a second major crop is possible, 1½ acres of land can give a family enough income to put them above the poverty line. If, in addition, we add subsidiary occupations, even a one-acre irrigated agriculture and peasant farming should make a viable occupation for a rural family. It has been estimated by the National Commission on Agriculture that the total irrigation potential available in the country is only of the order of about 50-55 per cent of the gross cultivated area. This again is a moving concept because we have yet to realise the potential of the land for multiple cropping. We have also to realise what are the scientific conditions. Even then, water being the constraint and population explosion being a fact of life, all steps have to be taken to ensure that we get maximum return within our irrigated lands both in productivity and in labour opportunities.

KARMA : The tribal folk dance of Orissa

SHRI BHAGIRATHI NEPAK

The tribal population of Orissa numbers 50,71,937 according to the Census of 1971 and forms roughly 25 per cent of total population. Orissa has a sizable population of Savra, Jharia, Kandh, Binjhal. Oraon, Bhuiyan, Gadaba, Paraja and Bonda. Each tribe has its own piculiar custom, dress social organisation and language. The more environmentally secluded they are, the more they are able to preserve their social customs. But the closer association with different tribal and non-tribal societies has caused mutual adoption of habits and customs in such a way that one is hardly singled out of the other unless marked very closely through their institutions.

Each one of the numerous tribes and sub-tribes numbering about 100 has its own pattern of dance and music which are rich, artistic and highly specialised. There are a variety of costumes and musical instruments. A study of Adivasi dance, music and drama would reveal how culture born out of nature and attuned to nature can live and flourish even without the aid of letters and how it is natural and spontaneous as life itself.

Indian Folk-dance is a vast subject of study which requires inclusion of various topics dealt in detail to represent it in proper forms. Each topic requires elaborate discussion on various points.

We have got several folk-dances of different regions of India. These dances originated among and maintained by the people without any external influence. These dances are not only the free expressions of joy in rhythm but also intimately related to seasons occupations and religious faith of the participants·

There are innumerable varieties of folk-dances practised throughout the country; but a close study will reveal that there is an unseen tie of unity among them.

There is need to study, preserve and foster Adivasi dance, music and drama because they relate to people who number almost one in four in the total population of the State of Orissa and have long merited the care and attention of the State.

There is the impact of cheap styles which invade them and the problems of a competitive world tend to deaden the sense of art in a people who were so long habituated in their natural surroundings to enjoy their lives mostly through their dance and music.

The folk-dances are performed by the village folk for their own pleasure and not with a view to entertain public such dances are the integral part of the social life of the uneducated or half-educated rural people who live close to and completely dependant on nature, being cut off from urban culture.

When we talk of tribal folk-dances, we mean those rural Adivasi dances which are practised by the tribes residing in hilly places, regions abounding in forests and areas not easily approachable. The natural environment has great impact on the character, taste and life tribal folk which invariably are reflected in their social and cultural life.

Thus it is easy to infer that the primitive dance is the foundation of both the folk-dance and the tribal folk-dance, The emotion expressed by rhe tribal folk while dahcing is in its purest form. This expression is not only original but also natural. These dances bear the traces of their oldest inhabitants who had incorporated into their dances their own social traditions and environmental conditions.

Both the folk-dances and tribal dances come under the category of rural dance.

There are festivals like "Gamha Purnima", "Akshyaya Trutiya", "Bakula Amabasya", "Dola Purnima", "Raja", "Makara Sankranti", "Karma", etc., observed in Orissa. These festivals are seen among the tribals which strongly plead for their tribal origin in the Orissa region.

The Karma festival is an eminent tribal function which has been adopted mostly by the peopie ot western Orissa. Dr. K. B. Dash has menticned in his book "Oriya Loka Gita 'O' Kahani" that Karma festival is being observed in the areas predominated by the tribals. This indicates its tribal origin.

The Karma Dance

Ceases the rain. The fields swell with paddy crop. Each and every member of the village assembles at the field thus engaging themselves in various phases of cultivation. Every heart filled in with aspiration and joy.

And here enters the autumn with blue and clear sky. The Hindus observe the Ekadasi "Vrata" by resorting to complete fast on the eleventh day of the moonlit fortnight, in the month of Bhadraba. And on this day, the Adivasis of Western Orissa arrange the Karma Festival and Karma dance.

The Adivasis firmly believe that if the 'Karam Sani', the chief deity of 'Karma Festival' is displeased, the entire village will suffer from loss of crops, rain and epidemic. Therefore they arrange Karma dance dedicated to the Goddess 'Karamsani'.

The puja pendal is constructed either at the one end of the village on the specious open field or in the centre of the communal ground. It is decorated with various leaves, flowers and fruits. A Karma (Name of the tree is 'Karma') branch is planted in the middle of the puja pendal. The Adivasi priest 'Jhankar' worships this branch and conveys the good wishes for the village.

This Karma branch is the representative and symbol of the Goddess 'Karam Sani'. She is worshipbed with wine, hens, cakes, rice, etc.

After the Karma worship, the Jhankar (priest) recites the hymns for the Karamsani and tells the story. The men, women and children seated around the Karma pendal listen to the songs of Karmapuja from the Jhankar. Then the young boys and girls assemble together and dance around the pendal.

The Karma puja and dance continue for two days. The entire village is engrossed in the puja and dance. The men and women of the village sing and dance throughout the night in groups. On the third day with the dawn they proceed on with the Karma branch in a procession to a near by river, stream or pond for immersion. All the members take bath there and return to village on this day, The villagers arrange a big feast. Each one of the viilagers arrange a big feast, Each one of the village attends to this feast and takes food sitting in a line. Then various types of merrymaking goes on and the Adivasis, forgetting their family and personal quarrels, sing and dance together. Amorous songs are sung, drums are beaten and young boys and girls dance and dance The whole village remains in drunken condition for two days.

In addition to wine and hens, unboiled rice, milk and sweetmeats are also offered to the Goddess 'Karam Sani' to get good results.

Bada Karma

The 'Bada Karma' festival is observed in every three years. Unlike the annual 'Karma', it is observed for long five days. The village which observes the Bada Karma festival, sends its young boys and girls to five different villages to exhibit the dance and song competitions. They stay for a single day in each village. The villagers of that village where the party rests, become the hosts and arrange for the lodging and boarding of this guest party.

This party is formed with young boys and girls of different villages.

All these five days they spend by drinking, singing and dancing.

The Karma festival provides oppertunities for young boys and girls for selection of their partners of life,

On the fixed day the performance of Karamsani Puja is done as usual,

KARMA FESTIVALS OBSERVED BY DIFFERENT ADIVASI SECTS

Bhuyan :

The Bhuiyans of Sambalpur and Mayurbhanj districts observe 'Karma Jatra' in the month of Aswina or Kartik (October-November). The date is generally fixed by the Dehuri (Priest).

The karma branch is brought by him and is planted before 'Mandaghar'. The girls offer rice, molasses to the plant. They sing story of Karma Raja and Karma Rani. All enjoy the night in dance, feast and music. Next morning the Karma plant is taken round the village and is immersed in water.

Binjhals :

The Binjhals mostly populated in Sambalpur and Balangir distrcts observe Karma festival most sincerely. it is their most important and indegenous festival and is observed on the llth day of Bhadraba every year. they perform the Karma dance charmingly.

Kuli :

The Kuli tribe is very small in number and reside in Balangir, Phulbani and Sambalpur district only.

In the evening of the eleventh day of Bhadraba, the boys and girls go out to the jungle and bring a branch of Karma tree,. This branch is set up at the Puja premises and is worshipped. The Kuli men and women offer rice sweetmeats to the Karm A fowl is also offered there.

In the next day morning the branch is taken away in procession and immersed in the village tank.

They pray for rain before the Karamsani.

Oraon:

The Oraons celebrate Karma festival every year in the month of October. This is an important festival for them. The worship is followed by dance and music accompanied with lot of drinking and festive meals.

Karma Song :

The Adivasis do not have any written language of their own. They compose and sing the songs in their spoken languages. Just through recitation they memorise these songs from generation to generation. The contents and the language of these songs are simple and delightful.

The Adivasis take birth, grow up and breathe their last amidst the nature. Hence their songs contain the feelings of various seasons, joys and sorrows of life, love and romance and the deeds of the past.

The true pictures of the village life and village surroundings are depicted in the Karma songs. Also the colourful dreams of the adivasi life and youth are the aided attractions of the Karma songs. Some unknown poet of the Adivasi village compose these songs. But no one recollects by whom or where and why these songs were composed. In a heriditary way they go on singing., just getting by heart the delicate feelings and sweet lyric of the enchanting songs, because it pleases them and touches their hearts in a wonderful way.

The songs speak, " Life is full of joy, peace and happiness. These can be attained amidst the blue sky, green leaves, colourful flowers, flowing streams, hilly springs, dances and songs, romance and sincere friendship. So, do not be desparate, do not breakdown. Kick away the so called wealth. Come on let us sing and dance and lead the life in this way."

Also, presently the mythological stories of Radha Krishna. Sita-Ram and Maha-Bharat are being sung through Karma Songs. The theme of the song may be related to the Goddess 'Karamsani' or certain episodes from the life of Krishna or Rama. It also deals with the problems relating to love of ordinary men and women. Some times there is exchange of questions and answers through songs.

The Karma-song-season starts after the worship of Karamsani, the Goddess of Karma festival. But it is also voiced in the winter and spring. Even while resting a while under the shady trees in the scorching heat of summer, while completely drenched in the downpours of rains, while cultivating at the fields, while rain ceases in the Autumn, also in various occasions and surroundings Karma song is echoed through murmurous voices.

In the midst of the Adivasi village and right down the neighbouring hill, the 'Mandalia' or drum-beater while beating the drums jumps out in singing.

" KARMARA DALERE
CHATIA NELA PHALERE...... "

And at the sounds of the drum and the call of the beater, the entire youths of the village are attracted surprisingly. All of them run together and assemble around the 'Mandalia' (the Drum-beater).

Karma Dance and Dress

Although Karma festival is being observed by several Adivasi tribes and sub-tribes, the Binjhals treat it as their most important and indegenous festival and celeberate it in their own traidtional way.

The dancers drummers, and singers all wear red turban on head. They look very charming with such type of dress. Peacock feathers are tied over the turban. They all wear red shirts, coloured clothes and ornaments on arms, necks and hands.

At first boys enter into the ground and dance. Then girls join them later. After sometime, both the boys and the girls dance and sing.

The men provide the music with the help of drums.

The women dance in groups interlocking arms at waist level moving back and front while swinging the legs.

Sometlmes the man and women form separate rings and dance with their feet joined jumping side-ways. Both the hands are sometimes placed on their waists and sometimes above the heads. Then they stand in two rows, men facing the women and sing as they dance.

The main attraction of the Karma dance is Mandal (drum). It is of 'Mrudunga' category. It is made of clay. Both the side are covered with leather. This is bigger in size than that of Mrudunga, thus producing thunderous tone.

The Mandaliyas beat the drums standing in the middle of Karma dance. The dancers move round and round forming a circle as they dance with charming steps. The acompanying songs are sometimes provided by the Mandaliyas. Their steppings are measured and artistic.

The dance begins in slow tempo, but gradually gather high tempo at the beat of the drums.

The Adivasi folK-dances and songs are not the luxuries but the inseparable portions of their lives.

It may be mentioned here that, the Karma dance is also being peformed by men and women of the 'Gond' tribe in *Madhya Pradesh*. The women stand in a row with arms inter-linked and sway in rhythm. The man form a ring or semi-circle and perform various acrobatic movements.

Karma Story

Although there are different Karma stories in different parts of Orissa, in all the stories the greatness of the Goddess 'Karamsani' is expressed by the story tellers. Among these, two stories. viz : The story of the merchant and his seven sons and 'The two brothers called Karam and Dharam', are most popular in the western Orissa.

The story of ' The merchant and his seven sons ' is as follows :—

" Once upon a time there was a merchant. He was very rich and happy with seven sons. All the sons were married and the entire family was leading a very happy life.

One day the merchant started with his ship for a business trip. He earned a lot in his business returned home happily. While he arrived at his village he summoned his sons and daughter-in-laws to come to the ship and worship the ship.

But at that time the entire village was celebrating the Karma festival.

The male members were beating drums and the female members were singing and dancing. The seven sons and their wives were also engaged in Karma festival. So they could not turn up immediately.

The late was not tolerated by the old merchant. He became annoyed and destroyed the Puja-Mandap and broke the Mandals (drums) too.

As this the Goddess ' Karamsani ' took exception and cursed the merchant. His ship drowned and the goods therein were destroyed. Not only his crops failed and the merchant became very poor the wealth and happiness of the family vanished within a very short period.

The merchant was disappointed and approached the Jhankar (village priest) for solution of his problems and advice.

Jhankar heard all his problems and ascertained the reasons. He told the merchant that all these mishaps are due to the curse of the Goddess 'Karamsani '. So the merchant should immediately arrange for the worship of the Goddess and celebrate ' Karma festival ' so that he will regain his wealth and the lost happiness.

After hearing from the Jhankar, the old merchant brought seven Karma branches and seven mandals (drums). The seven sons, seven daughters-in-laws began to dance and sing in front of the Goddess. The old merchant and his wife also joined them. The Karma festival lasted for seven days. After this the merchant arranged for a grand feast for the villagers.

Surprisingly, after seven days, the merchant got back his lost property. The cattle which fled away from his house returned back to his house safely. That year the merchant got good crops and the family became rich and happy again."

Such is the result of ' Karma ' puja and festival.

Wanted Graduates on Attractive commission and salary who can collect advertisement for—

1. Directory of Industries (yearly) ..	Rs. 150·00 each
2. Import Export (monthly) magazine	Rs. 5·00 each
Annual Subscription Rs. 60·00 ..	
3. Indian Product (monthly) paper ..	Rs. 5·00 each
Three years subscription Rs. 125·00	

Contact for PROSPEROUS FUTURE
WORLD DIRECTORY PUBLISHERS
DELHI-33

Gram : Directory
Phones : 717080
717274
710012

GEOTHERMAL ENERGY

SHRI DEBAKANTA MISHRA

A New Prospect

Ever since man first sat down in hot water springs to bathe, energy radiating from the earth's interior has been used for a variety of practical reasons. The Romans made systematic use of them for medicinal and recreational purposes, as well as domestic heating. In fact, the Italians are the pioneers of the modern use of geothermal energy for electricity generation. The Lardarello plant in northern Italy started producing electricity in 1904 and the total generating capacity there now is nearly 400 mega watts. At a time when fossil fuels specially oil and gas are becoming increasingly scarce and expensive, and when nuclear power faces an uncertain future, such a prodigious energy source cannot be ignored. And indeed, geothermal energy has become a warm new prospect. The table below gives a full list of the countries which have electricity generating stations using geothermal power : in all these countries further developments are being carried out.

TABLE

World Installed Geothermal Electricity generating capacity.

Country		Generating capacity Megawatts (M.W.)
Iceland	..	2
Italy	..	391
Japan	..	31
Mexico	..	3
New Zealand	..	192
U.S.A.	..	322
Total	..	941

(Source:—Unstatistical Year Book, 1973)

what is geothermal energy

Geothermal energy, in its broadest sense, is the natural heat of the earth. Where heat is concentrated in restricted volumes in the earth's crust, in a manner analogous to concentration of oil in commercial Petroleum reservoirs, the heat, or geothermal resource becomes accessible and potentialy exploitable. These resources can be used to produce energy, fresh water and minerals.

Geothermal Reservoirs-

Geothermal reservoirs occur in the following forms :

(*a*) Pockets of magma or malten rock transfer intense heat to surrounding rocks and water that may be trapped underground. If enough water collects in porous lock reservoirs, it can be recovered by wells. Attempts to tap the heat of magma directly have been blocked by temperatures as high as 2,200°F or 1,200°c.

(*b*) High heat flow regions of partly melted rock in the earth's upper mantle about 30 miles deep: Warm water that seeps underground. The water then migrates back towards the surface along fractures or returns by well tapping. At the surface it comes out as boiling water or steam, which can be harnessed to steam turbines.

(*c*) Besides the above two type of *hydro-geothermal* reservoirs there are *geopressured* resources. These are made of extremely hot water and dissolved methane of geopressured reservoirs, and elaborate drilling and processing equipment is being tested to capture the energy.

(*d*) *Hot dry rocks* near the earth's surface offer perhaps the riches potential source of geothermal energy, if recovery technology can be developed. Scientists hope to fracture the rocks by forcing cold water underground via a well. After the water circulates through the fractures, picking up heat, it would be recovered by a second well.

An yet more difficult adventure

The most astounding and impressive demonstration of the intense heat contained in the interior of the earth is evidence provided by active volcanos. A large number of imaginative schemes have been proposed to tap this energy. However, practical extraction of the heat from the lava pools left from the volcanic erruptions or from deep magma chambers (molten matter from the earth's crust) is a long way off in the future—if it is ever achieved. The most promising ideas appear to be those that envisage the introduction of a heat exchanger into the liquid melt and circulate a heat transfer fluid in a closed system to a conversion system at the surface. Obviously, compatibility and protection problems will have to be solved if the heat exchanger is to survive for any extended period of time. Drilling into the magma will be very difficult and exciting adventure.

Technology

Much of the technology of the oil industry can be employed in the development of geothermal resources. It is not surprising that the Oil Companies are among the major proponents of geothermal development.

Wells are dug, typically a mile deep, to tap the supply of steam and hot water. The steam is then used to generate electricity by the help of a conventional steam turbine, and the hot water is piped to nearby houses for space heating. For example, all the space-heating requirements of Reykjavik, the capital of Iceland are met by geothermal water system.

The transformation of geothermal energy into electricity is at present the most useful approach. But the steam temperatures being low by modern power station standards, the generation efficiencies tend to be extremely low, often down to about 10 per cent. Where heat can be used directly, as in Iceland, all the energy is useful and very little is wasted. Unfortunately, much of the world's geothermal potential is in areas where the temperature is hot and there is little need for such uses of energy.

Advantages and Disadvantages :

On the plus side, it is relatively clean, there is no fuel to buy the reserves (of hot water, if not of steam) are thought to be long lasting.

On the negative side, this energy is not as trouble free as one might imagine. An electrical generating station discharges huge amounts of hot water,which would cause harmful thermal pollution of water ways. Underground hot water dissolves many substances and becomes an aqueous solution with an appreciable concentration of many salts. These form deposits, especially of calcium carbonate and sillica in conducting pipes and surface equipment ; they also cause serious corrosion problems. Hydrogen sulphide, a foul smelling and toxic gas often accompanies the geothermal water and steam and considerable amount of troublesome components of boron, arsenic and mercury may cause water dispersal problems. Moreover, geothermal production wells remove huge quantities of underground water and this has led in some cases to local earth tremors and appreciable lowering of ground level.

Total World Geothermal Resources

The 1974 World Energy Conference Survey says that. . . .the maximum capacity for the largest hydrogeothermal resources, when totally exploited over 50 years is approximately 1,000 megawatts, and most large systems have capacities in 100 to 500 M. W. range. It is difficult to make reasonable estimate of total world geothermal resources since so little exploration has yet been done. There appear to be belts of geothermal reservoirs along the western side of Americas from Alaska to Chile; in

Kenya, Uganda, Zaire, Tanzania and Ethiopia; in the Phillipines, Indonesia, Burma and India; and in the countries around the Mediterranean (particularly Turkey). Calculations have been quoted which indicate a possible world potential of 60,000 megawatts, about the same as tidal power, or the present total electricity generating capacity of U. K.

The future may bring a switch to geothermal heating of homes and numerous geothermal-powered uses in agriculture and industry. Jane Bosveld aptly remarks, "...One advantage seems obvious; any lessening of demands on fossil fuels anywhere, through any cause, will help to case the shortages for the nation as a whole." Like all other scientifically advanced countries of the world, Indian scientists and engineers are at present busy in geothermal prospecting to locate geothermal reservoirs and to innovate new technologies so that the new technology may find proper and efficient use for the benefit of Indians.

Reader,
Ravenshaw College,
Cuttack-3

* * *

(Continued from page 12)

Sri Aurobindo has told us that the future belongs to the youth and the young and it is they who will create a new world order of truth, courage, justice, lofty aspiration and straightforward fulfilment. The future nation, only be built, he says on a foundation of brave, frank, clear hearted courageous and aspiring youth.

Let these words be properly understood while handling the youth and of her problems. The youth has to dedicate themselves not to the past or the present, but to the future· They will devote themselves to the realisation of God in themselves in all human beings and to a wholeminded and indefatigable labour for the good of the nation and for the good of humanity. This is their great responsibility. If they rise now which is the hour of God to realise this responsibility, they will have no problems, to face.

39, Udyan Marg, Bhubaneswar

Financial discipline—a problem in small scale sector in Orissa

SHRI N. C. PUHAN

In spite of terminological inexactitude, the small scale sector occupies a distinct place in the national and provincial economy as the panacea of rural employment and growth. It has gained exceeding popularity in the backward States, particularly, in Orissa. "Poverty in the midst of plenty"—a paradox, is the basic feature of Orissan economy. The prime factor attributable to such ridiculous state of affairs has been under exploitation of the natural resources of the State. The large scale industrialisation resorted to in the first five year plan failed to bring about the change contemplated. On the contrary, the Back-was effect" 1 of the industrial system created immense lot dehumanising socio economic problems like brain drain from rural community to industrial area and rural indebtedness. In consequence, the rural areas, have become the place of underaged and discarded souls—the nightmares of social advancement.

In fact, the self-reliant economic growth a Gandhian Utopia, through expansion of public sector and small scale industrial development got recognition and priority in to the successive plans. The developmental strategy meant to make a frontal attack on proverty curtain" .

The generation of employment avenues for vast million of unemployed, substained growth with justice and stability and bridging up the regional *socio-economic* disparities have been the purpose of the sectoral shift.

Even of the commendable performance and dynamism demonstrated in the recent past, the need-based and employment-oriented sector has to cover a long way to establish its indispensability in shaping the *socio-economic* structure. The new outlook calls upon rationalisation of effort and replacement of habitual antiquated practices by methods based on systematic reasoning[3]. To make the new deal effective, simultaneous institutional and atttitudional reforms is of imperative necessity[4].

GROWTH RETARDING FACTORS

The factors causing serious impediment in smooth functioning and blooming of the sector have reportedly been the followings requirring immediate attention to meet with—

(*a*) The discontinuous flow of basic raw-materials and lack of sheltered market for the goods of the sector.

(*b*) Inadequate infrastructure facilities such as, power supply.

(*c*) Dependence on skewed pattern of consumption of the urban population instead of catering to rural needs.[5].

(*d*) The poor capital base and incompetency owing to rigid conditions of eligibility, to avail institutional finance for genuine productive purpose.

(*e*) Absense of proper motivation and guidance for improvement of skill and efficiency through promotional programming.

(*f*) There is acute shortage of managerial talents and no remarkable aquisitiveness marked during past few decades in this regard.

(*g*) The dominance of the rural reach or affluents over the sector in place of genuine small scale producer as remarked by Dr. Bhubatosh Dutta.

FINANCIAL INDISCIPLINE—ITS CAUSE AND EFFECT

Finance is the life-blood business of any size. Its effective utilisation has material effect on firm's performance and prosperity too. As such, the financial management and control in every segment of the Capital hungry economy has assumed a great deal of importance. The general contention is that the paucity of fund ultimately dispells the small units. The innovative work and reports of many committees on working of this sector has proved the cozments as unrealistic and untrue. In majority of cases as the group found, the expulsion is due to unproductive and imprudent utilisation of available funds rather than the amount.

The reserve Bank study and findings in this regard highlights that the capital base of many units have been eroded because of continuous failure of these units to produce surplus even under normal health of the economy.

In pin-pointing the cause of increasing industrial "sickness", the group stated that the unreasonable growth of money supply and the resultant price escalation is the responsible factor. The number of "sickness" as estimated by the Group, rose from 270 in September 1977 to 334 in September 1978 and the total bank indebtedness of these units pushed up from 774 crores to 983 crores, i. e , 27 per cent during the period under study[6].

Basing on the fact finding study reports made by Dehejia Committee of September 1969 on lending system, Tonton Committee on Credit Extension, Karve Committee on working of S. S. and Village Industries set by Planning Commission in 1956 and the report of the Ford Foundation Team of 1960[7], the Reserve Bank of India introduced different schemes for purposeful deployment of bank finances. The act of streamlining of credit system, further aims at inculcating awareness among the borrowers to create resources through the effective management instead of absolute dependence on institutional financing.

The fostering care of the State Financial Corporation of Orissa taken in the field of small scale sector has been pioneering and encouraging. The table given below is the testimony of the co-operation and involvement of the institution in the promotional programmes of the small sector.

TABLE 1

Year		No. of persons granted loan	Amount of credit sanctioned (lakh)
1974-75	..	210	305·56
1975-76	..	509	621·12
1976-77	..	484	849·10
1977-78	..	425	542·44
1978-79	..	1,260	1,250·94
From 1-4-1979 to 15-12-1979.		1,517	1,213·11

Source—"PRAJATANTRA", 24-2-1980, Col. 7, page-6, Press—Statement given by the Managing Director of the State Financial Corporation.

SUGGESTIONS TO ENSURE FINANCIAL DISCIPLINE

Mutual Trust—In spite of sensitively responsive role played by different financial institutions to meet the varying needs and to develop economically viable and socially pleasant units, there is no love lost between them. In repercussion, the new credit policies and procedures introduced by the Banks instead of getting agile acceptance of the borrowers create misunderstanding and thus, bitter relationship since the nationalisation of Banks in July 1969

Sometimes, the sacrilegious industrialists expect too much from Banks irrespective of their competency and merit. On refusal they blame Bank and become trenchant critics of the latter. In fact, the Banks play with the money of others and follow certain principles like security, profitability and liquidity and see their strict compliance before giving credit. These principles are rigid but benefit to both bank and borrower is possible by minimizing the abuses of bank credit. Hence, the operative principles of the Bank should not be viewed as the principles of procastination but in their true perspective by the borrowers. Banks on the other hand, should explain and expound the new principles before their implementation to the present and potential borrowers to avoid misinterpretations. Both must try to create the climate of mutual trust and confidence and march, hand in hand for uptaking industrial reconstruction and growth possible only under the cordial and lasting relationship between them.

CREDIT APPRAISAL AND FOLLOW-UP

It has been observed in many cases that redundancy of fund available to a concern has been the cause of its untime death. It is said to have been the ultimate effect of the lack of proper study of potential resources needs and technological feasibility and economical viability of the units where funds are dumped.

To minimize the devastating effect. bank's follow-up action comprising control on fund utilisation and constant watch over the performance of the borrowing units have been remarkable. The systematic evaluation and supervision has been fruitful in respect of avoidance of diversion of fund, double financing and undue elongation of the period for which bank funds are locked up. The borrowers, on the other, should furnish the financial and operating statements as desired by the Bank as a token of their routine work to ensure better and timely supply of funds and to exert control over the end use of credit and maldistribution Above all, the banks should follow open door policy and hold periodic meeting to discuss the problems of both and chalkout the plan of operation which would infuse a sense of participation in the minds of borrowers.

MANAGEMENT REORIENTATION

India is a Country where the financial resources and managerial skill are relatively scarced requiring sagacity and diligence for its productive utilization. The success of business or any section thereof depends squarely on determination and devotion of the top-management with progressive, enlightend and pragmatic management style.[8] The planned objective of poverty eradication should be taken up as a challenge and at the same time, an opportunity to prove their compentency and worth by maintaining a high standard of efficiency and profitability specially during declining business trend. The time-based needs urge upon the professionalisation of management that acts as an insurance against business contingencies. The new out look is capable of creating an environment and motivation for harder and sustained work by the employees of a unit that ultimately widens the horizon of small scale industries in Orissa.

CREDIT PLANNING

The problem of poverty in respect of material well being and capital fund, can be tackled thoroughly and ruthlessly, only under a scientific credit planning system. The banks must chalkout their credit operation plan for such industrial sector keeping in view the economically weaker and spcially dumb million of tear jerking members of the village community. The planner should always keep it in mind that political equality accorded to them through Constitution has reportedly been a consolation because of existing economic disparity in the Society. The doctrine of "Common good for the greater number"—a compromise of marxian thoughts and the Gandhian ideal, should be guidelines of the banks credit system and procedure.[9]

The "lead bank scheme" which has gained currency in the recent years in the field of bank finance is a landmark in this regard. This micro-level credit plan will be more effective under the net-work of integration of credit plans among credit and non credit institutions with definite assignment of areas or industries to avoid double financing and undue concentration in certain area or field of activity.

REFERENCES

1. Gunar Myrdal .. "Myrdal on productivity" quoted in journal of productivity Vol. I (September 1960) P. 481.
2. Mahabub Ul Haq .. "Poverty curtain" page 40. World bank economist.
3. Kedar Sangha .. "Productivity and economic growth" 1964, page 14 quoted the words of Gunar Myrdal.
4. C. N. Vakil and P. R. Brahmananda. A survey of Economic Research (ICSSR Publication)
5. C. H. Hanumantha Rao .. "Poverty and development technique of less developed regions in India", Economic and Political weekly, special number 1979, page 1307.
6. "Prospect of Industrial growth bleak". Statesman 21st November 1979, page 1, cols. 2, 3 and 4.
7. Report of the Karve committee set by the planning commission on village and small scale industries in 1956. Report of Fort Foundation team on Small Scale Industries in India, International Planning team sponsored by Ford Foundation 1960.
8. "Bank and Industries" .. "Banker" Vol. XXIV, May 1973, No. 3, page 14
9. P. P. Mitra .. "Plan spanning 'Yojana' Vol. XXII/16 between 77-78 to 82-83 to restrict price fluctuation" 1st September 1973 page-5.

Department of Commerce
B. J. B. College, Bhubaneswar

FACILITIES FOR ORISSA PASSENGERS BY DELUXE TRAIN FROM HOWRAH TO NEW DELHI

As a result of pursuing the matter by the State Government for additional travel facilities for passengers going from Orissa area to New Delhi via Calcutta, the Railways have now allotted 8 A/c. sleeper berths by Deluxe train from Howrah to New Delhi for such passengers with immediate effect. This quota has been distributed as follows.

Bhubaneswar	..	4 berths
Cuttack	..	2 berths
Puri	..	2 berths

It is expected that passengers from coastal Orissa would be greatly benefited by this additional quota by Deluxe Train. However, this quota will be available for all days except the Deluxe Train leaving Howrah on each Tuesday.

Problems of the Deaf in our society

SHRI A. G. BHATTACHARYA

A child when born brings joy and hope of prosperity in a family. As he grows up he needs help, guidance and social security and society nurtures him to see him as "Child is the father of the man". When parents watch him to grow it is noticed that a few become normal and others super-normal children, while yet a few unfortunate ones emerge as handicap who may be broadly classified as deaf, blind, mentally retarded or otherewise handicapped. Members of every group have different problems to face in the society. Here let us try to find out the problems of only of the deaf.

Till very recent past very little attention has been paid in this State to detect deafness, classify them scientifically and find out means to save them from dumbness and educate them as useful members of the society. Actually very few State of India have utilised resources to educate and take care of the deaf to enable them to lead useful life in the talking society. Most of our friends and citizens of Orissa do know that deafness leads to dumbness but a few know that dumbness can be controlled, can be overcome and the sufferers can be made to talk and becom fit to enjoy life almost as happily as a normal member of his family. when a child is detected to deaf the general tendncy among the uneducated is to offer prayers to God and leave the child as an incurable dumb to remain as a thorny plant in a family being shunned, thrown aside and pitied in every sphere. Those who are enlightened generally get the deaf examined by an ENT Specialist, who declares the deaf and then try to cure him by medicine and operation. A few find out a deaf and dumb school and get the child admitted for whatever education the institution may impart. Most of the parents feel that they have no useful responsibilty of their own to put speech in the mouth of the deaf. In Orissa there is hardly any institution worth the name where the deaf can be properly educated and trained so that they will not become dumb and will not grope in darkness with sign language throughout the life confining their expressions within the limited world of silence of the deaf. Even very few among the educated know that by perserverance. labour and proper method of education by the use of hearing aid, by learning phonetics and lip reading a deaf can speak and he will not be dumb. Deaf, I mean the profound deaf, also can acquire the ability to talk considerably bringing them to the beautiful sphere of the talking society.

Classification of the deaf

Deaf can be classified under various categories. It will be difficult to deal with all of them in this small write-up. To understand the deaf we may roughly classify them as partially deaf and profoundly deaf. These deafnesses are generally caused by defects of the middle or inner ear due to diseases or injuries. There is another sub-group of nerve deafs under the second category of profoundly deaf· One is to remember that deafness causes dumbness partial or full according to the intensity of nerve injury. When a man does not hear he does not speak· If we do not hear English language or even Oriya language will remain dumb so far as these languages are concerned, If the child does not hear human voice from childhood he will not articulate. If one hears distorted sounds his vocal cherds will produce only discords and no meaningful words to be understood. In other words a deaf child will become partially or fully dumb according to the damage to the auditory system. I of course leave out other causes caused by defects of tongue, larynx and other organs·

Those who are partially deaf can be given proper treatment, medicinal or surgical and can be properly aided by hearing aid or lip reading. These will enable the child to overcome his handicap of speech very considerably. With moderate effort and guidance he will be able to speak and float in the main stream of children getting education by audiovisual methods. Today every developed country is anxious to find out how to make the nerve-deaf and other categories of profoundly deaf, speak. The aim is not only to make them speak but to enable them to live a full life in the talking world of this near and dear relatives and to serve the country as any one of our normal children do.

Detection

Up-till now; as far as my limited knowledge goes, there has been no proper survey of the deaf population. Detections are only done by the parents as children grow up. Parents who are sufficiently educated and alert detect the deafness when the child is of a few months of age but the majority defect it very late when the children become a few years of age and articulate unintelligible jargons. Even when detection is done early, parents spend months and years before they can make up their minds to take steps for proper measurement of the intensity. Prayers before every deity is the only thing done for the recovery of the hearing power without corresponding scientific steps to cure or overcome the deafness and thus save the child from becoming dumb. In the case of nerve-deaf or profoundly deaf the groping in the darkness continues and the child grows older and older, his voice sets and ultimately it becomes very difficult for any teacher to modulate the sound and develop regular speech.

It is now high time that the State gives the lead to held parents to detect deafness in time without much worry, difficulty and expenditure to them. As a first step auditometers may be provided in every district hospital to be operated by a speech therapist or a technician under the guidance of an ENT Specialist. Then these facilities can be further extended to important subdivisional hospitals as well. In the State Hospitals in Medical Colleges and Schools for the deaf fully equipped testing centres may be established with facilities for teaching phonetics and lip reading.

Psychology of the deaf

Deaf children are almost like normal ones with similar intelligence quotients. Both of them have got same types of retentive and creative powers of the mind. Some people love to say that when God takes away the hearing capacity of a boy he compensates by increasing other capacities. My experience is limited to training of my only son. I feel there is no compensatory power given by nature. When a deaf child grows up he is forced to use his eyes and sence for detection of vibration more and more and these senses become sharper than others. Thus as a deaf child grows up more and more he is able to use his visual ability, his sense of vibration and capacity to remember more than those of his talking friend. These capacities should be the main channels to the teachers of the deaf to inject knowledge and extract talk from the deaf. The teacher should know how to stimulate them and utilise them more fully.

Very few of us seldom realise that our thought process depends mainly on our vocabulary. In the case of the deaf they are in abject poverty of vocabulary, so their thinking process is restricted. They find it difficult to describe or mention on ordinary object or a simple thought. When it is a question of abstract thinking the deaf handicap is completely helpless. Here to a large extent the blinds and other handicaps are somewhat more fortunate than the deaf. The blind can hear other speak, he can reply suitably. he can put forth his own grievances easily. A deaf only states, he is unable to express, he suppresses an anguish for inability to ventilate his own joy, griaf or anxiety. He feels others can move their lips and smile or enjoy and do a work systematically whereas when a deaf moves his mouth or produces an uncouth sound others laugh and mock at him and move away from him casting a backward look of scorn and pity.

In this way the deaf develops a mental hatred and suspicion against the talking society. He wants to shun his family and friends and seek refuge among those who can express by sign language and welcome him. But will the parents and teachers remember that after all the deaf is to live in the talking world, he is to learn speech, abstract thinking, he is to understand others talk and contribute his own mite to eke out of his own existence and build the society in some constructive manner as his normal colleaques ? These are the mental complexes which are to be tackled by the teachers and the parents with sincere sypathatic attitude, dependable guidance and appropriate help financial and otherwise.

ON DEAFNESS

"The problems of deafness are deeper and more complex" if not more important, than those of blindness. Deafness is a much worse misfortune. For it means the loss of the most vital stimulus the sound of the voice that brings language, sets thought astir and keeps us in the intellectual company of man.

Helen Keller

Institutions of Training

I have a deaf son from December 1951. My wife late Mrs. Rama Bhattacharya detected his deafness by the middle of 1952. After doctors judgment I almost collapsed thinking that I had reached the dead end of my future life. However soon we started searching for a good training institution. I found there was none worth trying in Orissa. The only one which was at Bhubaneswar tried to educate the deaf and dumb and the blind together. It was though their problems would be best understood and solved by a single deaf untrained teacher. What result we could expect despair and frustration. It was unfair to have kept the two categories together in charge of deaf teacher and then blame both the teacher and the taught. Till very recently the institution was trying to keep the deaf and the blind together when many unpleasant incidents happened leading to long waited separation of the two groups to be taken care of by two separate institions. When we consider the education of the deaf we will have to bear in mind two points fitstly to teach them speech and secondly to teach them the 3 Rs which normal children learn. There should be scope also for higher education, It should on no account be assumed that the deaf will not be able to acquire higher education than the primary standard. My limited experience leads me to believe that most of the deaf boys can achieve education upto the end of higher secondary standards. This level of education may not open up very many avenues of employment but this will enable them to communicate with meaningful ease, Somewhat higher level of education than primary will enable the deaf to save themselves from relapse into illiteracy and will enable them to take up some trade or vocational training more confidently than what a deaf with primary education can do. Some education beyond the primary stage will also keep the mind of the deaf broadened and receptive as well.

Upto the primary stage sense training, phonetics, breating exercise, games, movements of tongue, teeth, lips, throat, Adam's apple should be taught with visual and vibration methods. An educator of the deaf is to remember that the method of teaching normal children has two aspects, viz., "audio" "visual". For the deaf the audio portion is obliterated. So the teacher is to take the help of the eyes. He is to teach phonetics, interpretation of vibrations, some sign language and then the primary class books which normal children read. In the primary stage lip reading sense training and 3 Rs. a should go hand in hand. When one goes beyond the primary stage the deaf should be integrated with educational institutions meant for normal children. The transparent sound barrier between the deaf and talking should be slowly removed. protection should be extended to the deaf against the hatred and teasing by normal children.

Guardians have a very vital part to play in lip reading. If we ponder for a moment we will realise that a normal child gets repetition of words like "Mā". "Bāpā", "Dākhā", "Kāu". "Aā", "Jā" and a host of other words hundreds of times from mother, father, brother, sister and so many other family members from morning till evening. But a deaf boy neither gets any chance to hear normally nor even correct repetitions. These repetitions of essential small words and syllables are to be given by parents who must learn the origins of a few vowels and consonents. These facilities can be provided by the Social Welfare Boards, by the speech therapy centres of the State and by the primary school teachers for the deaf schools. Then only the deaf boy will get affectionate repetitions throughout day and night. This is possible for at least 70 per cent to 80 per cent of parents. One is not to ridicule the idea, one is to try sincerely and learn the pronunciations of essential vowels and consonants. Eminent voluntary organisations like Rotary International, Lions Club, Rama Krishna Mission and others may establish such pioneer small training centres.

In the High School there should be one or two teachers trained in lip reading who will be able to help out those students who will be occasionaliy forgetting their phonetics.

Lip reading, sense training and co-ordination with books meant for normal primary school class students take long time. It taxes the ingenuity and patience of the teacher. Such teaching is to be imparted on individual basis. One trained teacher can teach at best 3 or 4 students at a time. Even 6 will be streneous. In Bhubaneswar school where group hearing aids are not available each trained hand is handling about 30 students. I would suggest that some really trained experts examine this situation. I am so much indebted to our revered trained teacher Miss P. Mahapatra of Balasore who first taught my son to speak by lip reading. She had to endure tearing of hair, kicks from my son, sweating all over the body before the first word Pata came out ftom the mouth of my son Shri Bidhu Shekhar Bhattacharya. His pet name is Rānā. By the way, though nerve deaf, he has learnt lip reading. He not only passed Higher Secondary Examination in second Division but has passed Bachlor of Architecture Examination also a course of 5 years from the Delhi University and is now employed as a full-fledged Assistant Architect in Central Government Undertaking MECON.

I have a Diploma in Education but I am not trained teacher for the deaf from any institution. From the experience which I have gathered by educating my son I may place before you that the process of teaching the deaf should be slow but steady, it is to proceed very carefully from known words to unknown. There should be systematic breathing exercise, rhythm control of breath, voice throwing, rhythm of words, sentences and poems. There should be occasional exposure to rhythmic sounds and songs. Hearing aids, where possible, should be technically appropriate to the exact defects of the ear. Parents are not to purchase costly aids here and there, Government may seriously consider to lend a helping hand to establish a hearing aid centre with properly qualified adviser to guide.

Rehabilitation

Rehabilitation of the deaf is a difficult problem which State alone can solve. Important voluntary organisations like Rotary International or others may help in this very substantially. Generally deafs can do well in a trade which produces articles of repetitive type. They are generally good at drawings and paintings. It will be difficult for them to man jobs where discussions with many men are needed. They are excellent workers where concentration in work is necessary. Generally they avoid politics and are more amenable to discipline. In such works they will give better outturn to their employers than what their normal counterparts do.

Government at the Centre have been kind enough to help the deaf by scholarship (my son got scholarship for about 10 years from the Social Welfare Ministry). Central Government has reserved 3 per cent of seats for various categories of handicapped in Class III and Class IV category of employment. They have thrown the higher educated ones to rub shoulders with the normal candidates the result is that the deafs are being pushed back. Reservation in higher category of posts also is must if the deaf has qualified for it with tremendous amount of labour, determination, expenditure and at times against insurmountable discouragement.

I shall fell grateful if my words make useful impression in the minds of administrators. Parents of deaf children to ponder and analyse their problems and help them take suitable steps. We the talking members of the society inside Government machinery or outside are to stoop to conquer the deaf. They cannot raise their hands and only grope in darkness. I hope these few words will not fall in deaf ears.

PRAWN CULTURE BY OMCAD IN PARADEEP

The Orissa Maritime and Chilka Area Development Corporation has stocked over 1,20.000 prawn juveniles in 20 especially designed tanks of brackish water located along the road to Nehru Bungalow in Paradeep. These prawns are growing rapidly and fed on natural food derived from the tidal water which flow into the tanks during full moon and no moon periods.

In one tank where juveniles were stocked in January the prawns have attained a length of six inches, and will reach 8 to 9 inches by June.

The Chairman of the Corporation has made arrangements with the technical staff to show the techniques of farm construction, management and shrimp culture to all those interested in growing prawns in brackish water creeks and ponds. The OMCAD Corporation will also train young men to acquire practical training.

The Corporation expects a yield of 300 Kgs. per acre for each crop of 4 months.. 2 crops a year are possible. In the prevailing high prices of Rs. 60 per Kilogram this is a profitable venture and should be taken up by those owning brackish water areas, creeks and low lying coastal areas.

The musical tradition of Pala and Dasakathia

SHRI INDU BHUSAN KAR

Orissa the land of Jagannath is a treasure house of musical traditions with various patterns of folk elements which has got social, cultural background. The music forms the core of folk songs, folk ballads, pala, dasakathia and dances of Orissan people. The music is heard in the nooks and corners of the rural life specially in colourful folk festivals which is a unique characteristic of Orissan cultural life. This spontaneous outflow of the life of the people is expressed in different forms of social entertainment with a purpose of self-education which passes from person to person, from generation to generation as a part of inherited rythm of life. This is a natural flow of life among the rural unsophisticated people who wants intimate communication with a main purpose of enjoying life out of isolation. When a tiny village is devoid of any sort of social arrangements of giving pleasure through Books, Newspaper Radio, Television, the villagers feel extremely isolated and they find their own natural way of life by staging folk songs, folk dance, pala, dasakathia and this media of expression is like a flow of river flowing in the veins of the rural folk as a social institution.

The pala and dasakathia are two unique mass-media which is still thriving in Orissa inspite of the sophisticated means of social amenities after the advent of western education. Pala is a popular and cultural institution which carries the aesthetic value of the peoples' culture. The poets imagination takes a form of mass drama staged on the open courtyards of lonely villages and gives immense pleasure to the mass.

The historical background of "Pala"

The Pala is a peculiar form of mass drama which had its origin in medieval Orissa. It is said that Pala is a socio-cultural institution which became a part of social life after the Muslim started invading Orissa. Dr. Kunja Behari Das, an authority on folk lore, has stated "Pala derived its origin from an attempt at Hindu-Muslim unity. Hinduism by its adaptability and noble ideals could make other religions its own. They merged and lost their individual peculiarities like rivulets in the wide sea". Dr. Das has illustrated with examples that this Pala is a product of Hindu-Muslim culture for narrowing down the fanaticism of Dharma and preaching religious tolerance by staging this sort of mass drama of Satyanarayana Pala. In the word Satyanarayana, Satya of Hindu and Pira of Muslims are combined. Satya means 'God Bishnu' and Pira means an old Preceptor. It is a fact that Satyanarayana Pala which is still staged in the remote villages has got its songs and dialects of both Persian and Oriya with Bengali linguistic accents. But if we go deep to the history of art and architecture of Orissa we find that a sort of mass drama in a form of Pala was also prevalent during the period of Ganga Dynasty. The Nata Mandapa indicates that there was a Mandap where the Nata (Drama) a sort of Mass Drama or Folk Drama was staged in the then period. It will not be incorrect to say that the Pala was prevalent also in the period when the Temple building was a great art developed and patronised by the Kings.

The technique of 'Pala'

The Pala has got its peculiarities unlike the ordinary Yatra. The Pala consists of 6 (six) persons with Chief Singer as its leader. The other persons act as drummers. The Chief Singer's helper is called Sirapalia who helps the Gayaka in singing and reminding of the lines which are forgotten. The others play Mrudanga and dance. The Chief Singer sings and explains the inner meaning of the songs to the people with different quotations, comparisions which enchants the audience. The dress of the Chief Singer is very interesting. He puts red shirt, silk chaddar with embroidery and during his singing, he plays on a pair of cymbals in between his right fingers and he holds a Chamara which moves slowly while singing. The audience is moved by the exposition of the different Pouranic texts. With a moving oratory the Chief Singer with his melodious voice and gentle behaviour conquers the heart of rural people. The Pouranic literature form the basic theme of these Palas. Many Pouranic stories or mythological stories like stories of Parsuram Rama are staged. The Trinath Pala is generally the Pala of Satyanarayana, Matsyenranath, Goraknath. The Kabi Karna Pala speaks of a wood found in the waves of the sea out of which the Image of Jagannath was built. The Skandha Purana also forms the part of thematic contents of Oriya Pala.

The medieval poets like Upendra Bhanja, Dinakrushna Das, Gopal Krushna, Jadumani have enriched Oriya Pala to a great extent. The famous "Koti Brahmanda Sundari" of Upendra Bhanja and "Rasokallola" of Dinakrushna are sung by the Gayakas in Oriya Pala and lyricism of these poets enriched this mass drama to a great extent which can not be oblitorated from the minds of the people inspite of the popularization of Radio and Television.

The motives of the Pala

The main motives of this Pala is religiousity which have got the mass appeal of the Orissan culture is culture of religious catholicism. In a full-moon day when the Pala is staged with melodious sounds of the *"Mrudanga"* with the charming expression of the songs, the rural folk are greatly moved by the lyricism of the songs. The melody of the song, the humour of the singer, the charming dress of the *Main Gayaka* create a sense of idenity in the minds of illiterate people who get immese pleasure. The music unites them in to one and they forget the sorrows and sufferings of the daily life. In the next day morning when the farmer goes to his fields singing the interesting songs of the Pala and get inspiration to plough the field. The music and the message of life that run side by side of this popular social and cultural institution of Pala which I think is continuous tradition of performing art. Some may question that after the spread of mass education and Industrialisation the Pala will be a part of decaying culture but so long the pepole love the music and the cultural values, the pala will have its place in the modern age in different forms.

Dasakathia

Dasakathia is a novel form of party music of village life sung by village birds. Dasa means Worshiper and Katia means Kathtali. Dasakathia is derived from the word Dasakathia it means one who plays on the Daskathi is called Dasakathia. This Daskathia consist of two persons, one is Chief singer (Gayaka) the other is the helper to the chief singer called Palia. The two persons perform the musical drama like Sita Harana (the elopment of Sita) or Kansha Badha. The pouranic stories form the thematic contents of these Dasakathia. This dasakathias are generally devotees of a religious sect. The musical pattern, the linguistic accentuation and the melody. of the different layas charm the heart of the audience.

The Historical Background

Daskathia is an age-old cultural institution which has its origin during the period of 10th century when the Dabadasi dance was a form of folk dance which was developed from the temples' festivals. In Ganjam district these Dasakathia are very popular and this folk music is unique in its character. There are many change after the development of the oddisi dance and music. We find the impact of oddisi music on Dasakathia which are played now-a-days. The impact of Dasakathia on the rural people is so deep that it cannot be said that it has got no social significance.

Technique

The two persons one Gayaka, one Palia with their melodious voice can charm the audience like a snake charmer charming the snakes. They introduce humorous stories and change the voices one after another and break the monotony of the time and space. There are three peculiar characteristics which are most important in this Party music. (1) Rythmic pattern of laya, (2) Linguistic accentuation, (3) The impact of Oddisi lyricism of oddisi music. The tune of palia which changes tune in every pause of the song is very interesting. The Palia sings, *"Rama Je Rama Je Rama Je, Nabina Sundara Ghanasyama Je"*. The mass movement through music and songs with social entertainment value form the most important aspect of this Daskathia Technique.

The religiousity is the main motive behind the dasakathia which still thrives in many villages of Orissa. It has got social appeal to all people iriespective of caste and creed. The universalism of this artistic technique is still a peculiar cultural trend which sustain the social life with a great vigour. It gives impetus to the rural folks to work and live happily with minimum of wants which is being taught through this folk music.

The music is the soul of Oriya life and Orissan culture. Whenever any social festival is held, Pala and Dasakathia form a part of such festival because the people are fond of songs and music. Since time immemorial the artistic and aesthetic values of Orissan culture have been enriching the minds of people of land of Lord Jagannath, through folk dance and folk music which so called sophisticated modernism with its technological bias cannot efface from the cultural map of Orissa. This is the unique aspect of the liberal Orissan culture which is still loved by the people of other lands.

Editor, Image,
IMAGE PUBLICATION,
At/P.O. Sahadevkhunta,
Dist. Balasore.

LABOUR INTENSIVE WORK ACCENT ON

Government of Orissa have issued instructions to all the agencies engaged in the implementation of plan programmes to defer purchase like vehicle, equipments and materials during next four months to accommodate requirement of funds for labour intensive works in the drought affected areas.

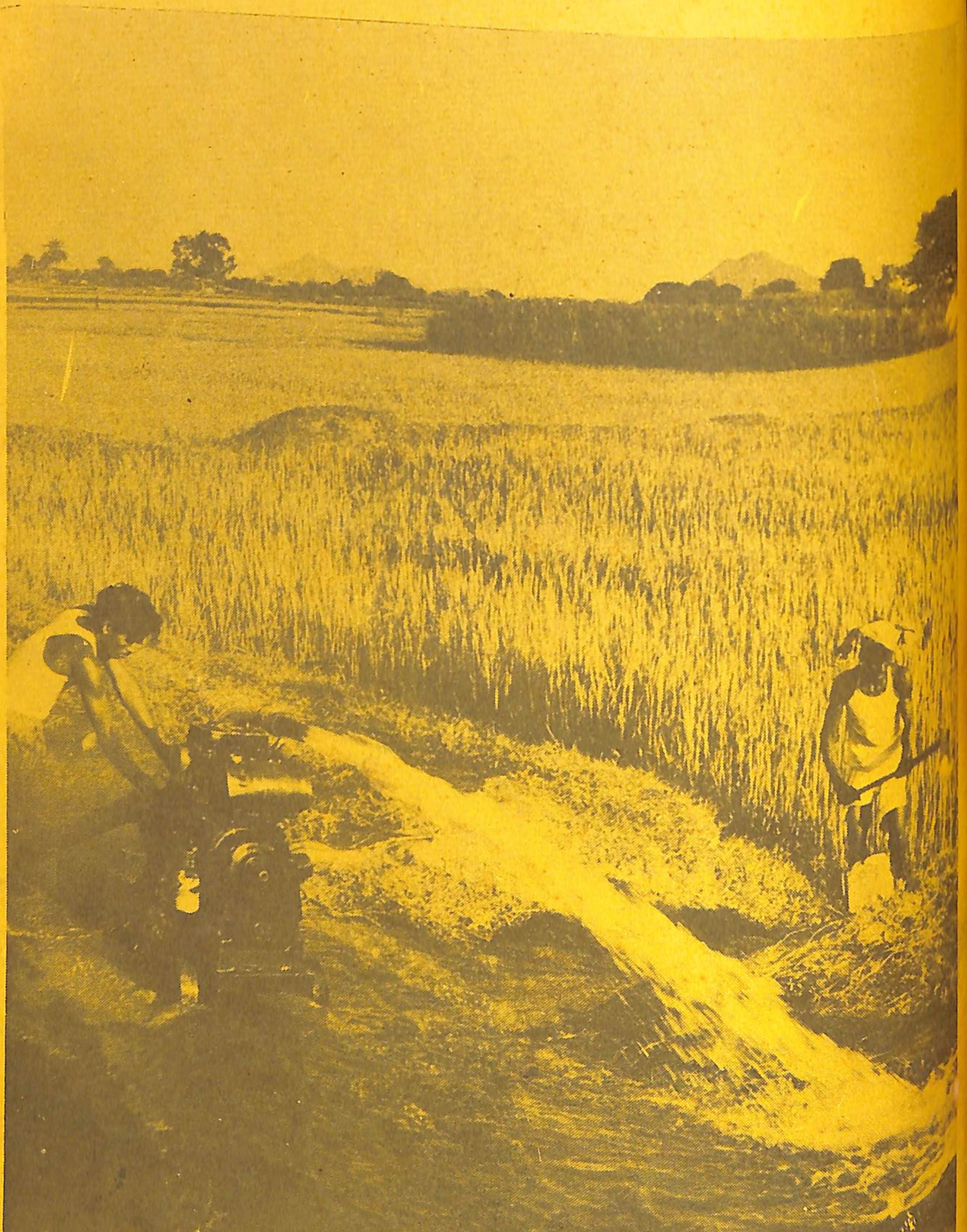
The Planning Co-ordination Department, in a circular have advised all departments to regulate the sanction of funds under normal State Schemes in such a manner so that maximum funds are available for labour intensive works in rought affected areas to mitigate the distress of the people.

'Food for work' Programme at Badabandha in Athamallick

Shri C. M. Poonacha, Governor of Orissa, addressing the Senior Officers of the State Government at the Secretariat, Bhubaneswar, on May 2, 1980.

Shri C. M. Poonacha, Governor of Orissa, addressing the Collectors' Conference at Bhubaneswar on May 7, 1980. Shri K. S. Raghupathi, Advisor to the Governor, is also seen along side.

Vol. XXXVI No. 10 ORISSA REVIEW Regd. No. O-5
Licence No. C R. N. P. 5—Licensed to post without Pre-Payment



Irrigation—Key to increased Production

PRINTED AT ORISSA GOVERNMENT